



Grass Collection System with Dump Hopper 200 Series

Owner/Operator & Parts Manual

Model
892031

TABLE OF CONTENTS

Safety	3	Storage	16
Assembly	7	Troubleshooting	16
Removal	14	Specifications	16
Operation	14	Parts List	17
Maintenance	15	Warranty	24

INTRODUCTION

THE MANUAL

Before operation of unit, carefully and completely read this Manual and the unit's Owner/Operator Manual. The contents will provide you with an understanding of safety instructions and controls during normal operation and maintenance.

All reference to left, right, front, or rear are given from operator sitting in operation position and facing the direction of forward travel.

MODEL AND SERIAL NUMBERS

Transfer model & serial number label from product registration here.

When ordering replacement parts or making service inquiries, know the Model and Serial numbers of your unit.

Numbers are located on the product registration form in the unit literature package. They are printed on a serial number label, located on the hopper of your unit.

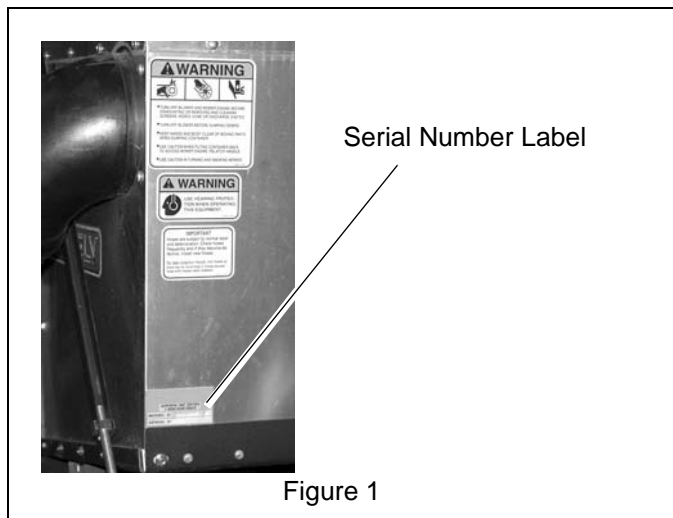


Figure 1

- Record Unit Model and Serial numbers here.

PRODUCT REGISTRATION

The Gravelly dealer must register the product at the time of purchase. Registering the product will help the company process warranty claims or contact you with the latest service information. All claims meeting requirements during the limited warranty period will be honored, whether or not the product registration card is returned. Keep a proof of purchase if you do not register your unit.

Customer Note: If the dealer does not register your product, please fill out, sign, and return the product registration card to Gravelly.

UNAUTHORIZED REPLACEMENT PARTS

Use only Gravelly replacement parts. The replacement of any part on this unit with anything other than a Gravelly authorized replacement part may adversely affect the performance, durability, and safety of this unit and may void the warranty. Gravelly disclaims liability for any claims or damages, whether warranty, property damage, personal injury or death arising out of the use of unauthorized replacement parts.

DELIVERY

Customer Note: If you have purchased this product without complete assembly and instruction by your retailer, it is your responsibility to:

- Read and understand all assembly instructions in this manual. If you do not understand or have difficulty following the instructions, contact your nearest Gravelly Dealer for assistance.

NOTE: To locate your nearest Gravelly Dealer, go to www.gravelly.com on the internet.

WARNING: Improper assembly or adjustments can cause serious injury.

Before attempting to operate your unit:

1. Make sure all assembly has been properly completed.
2. Understand all Safety Precautions provided in the manuals.

3. Review control functions and operation of the unit. Do not operate the unit unless all controls function as described in this manual.
4. Review recommended lubrication, maintenance and adjustments.
5. Review Limited Warranty Policy.
6. Fill out a product registration card and return the card to the Ariens Company or go to www.gravelly.com.

DISCLAIMER

Gravelly reserves the right to discontinue, change, and improve its products at any time without notice or obligation to the purchaser.

The descriptions and specifications contained in this manual were in effect at printing. Equipment described within this manual may be optional. Some illustrations may not be applicable to your unit

SAFETY

SAFETY ALERTS



Look for these symbols to point out important safety precautions. They mean:

Attention!



Personal Safety Is Involved!

Become Alert!

Obey The Message!

The safety alert symbols above and signal words below are used on decals and in this manual.

Read and understand all safety messages.



DANGER: IMMINENTLY HAZARDOUS SITUATION! If not avoided, **WILL RESULT** in death or serious injury.



WARNING: POTENTIALLY HAZARDOUS SITUATION! If not avoided, **COULD RESULT** in death or serious injury.



CAUTION: POTENTIALLY HAZARDOUS SITUATION! If not avoided, **MAY RESULT** in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTATIONS

NOTE: General reference information for proper operation and maintenance practices.

IMPORTANT: Specific procedures or information required to prevent damage to unit or attachment.

PRACTICES AND LAWS

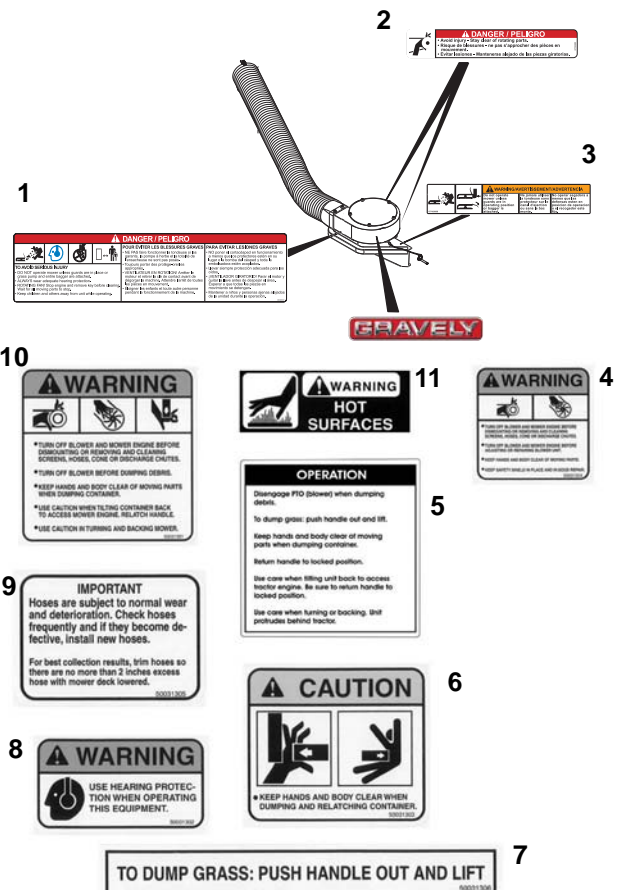
Practice usual and customary safe working precautions, for the benefit of yourself and others. Understand and follow all safety messages. Be alert to unsafe conditions and the possibility of minor, moderate, or serious injury or death. Learn applicable rules and laws in your area. Always follow the practices set forth in this manual.

REQUIRED OPERATOR TRAINING

Original purchaser of this unit was instructed by the seller on safe and proper operation. If unit is to be used by someone other than original purchaser; loaned, rented or sold, **ALWAYS** provide this manual and any needed safety training before operation.

SAFETY DECALS AND LOCATIONS

ALWAYS replace missing or damaged Safety Decals. Refer to figure below for Safety Decal locations.



1. DANGER!

To Avoid Serious Injury



DO NOT operate mower unless guards are in place or grass pump and entire bagger are attached.



ALWAYS wear adequate hearing protection.



ROTATING FAN! Stop engine and remove key before clearing.

Wait for all moving parts to stop.



Keep children and others away from unit while operating.

2. DANGER ROTATING PARTS

Avoid Injury

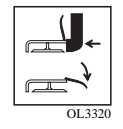


Stay clear of rotating parts.

3. KEEP GUARDS IN PLACE



Do not operate mower unless guards are in operating position or bagger is attached.



4. WARNING!



Turn off blower and mower engine before dismantling or removing and cleaning screens, hoses, cone or discharge chutes.

Turn off blower and mower engine before adjusting or repairing the blower unit.



Keep hands and feet clear of moving parts. Keep safety shields in place and working.

5. Operation

Disengage PTO (blower) when dumping debris.

To dump grass: Push handle out and lift.

Keep hands and body clear of moving parts when dumping container.

Return handle to locked position.

Use care when tilting unit back to access tractor engine. Be sure to return handle to locked position.

Use care when turning or backing. Unit protrudes behind tractor.

6. Caution



Keep hands and body clear when dumping and relatching container.



7. Operation

To Dump Grass: Push Handle Out and Lift

8. Warning



Use hearing protection when operating this equipment.

9. Important

Hoses are subject to normal wear and deterioration. Check hoses frequently and if they become defective, install new hoses.

For best collection results, trim hoses so there is no more than 2 inches excess hose with mower deck lowered.

10. Warning



Turn off blower and mower engine before dismantling or removing and cleaning screens, hoses, cone or discharge chutes.



Turn off blower and mower engine before adjusting or repairing the blower unit.



Keep hands and feet clear of moving parts. Keep safety shields in place and working.

11. Danger! Hot Surfaces



DO NOT TOUCH parts which are hot from operation. Always allow parts to cool.

SAFETY RULES

Read, understand, and follow all safety practices in this Manual, Owner/Operator Manual, and Engine Manual before beginning assembly. Failure to follow instructions could result in personal injury and/or damage to unit.

ALWAYS remove key and wire from spark plugs on unit before assembly. Unintentional engine start up can cause death or serious injury.

Sharp edges can cut. Movement of parts can cut off fingers or a hand. Wrap blade(s), wear sturdy gloves and use extreme caution when working near blades.

Installing the blower assembly on your mower requires the removal of the discharge chute deflector and belt guard. Retain discharge chute, hinge pin, belt guard and belt guard hardware in a safe location and reinstall whenever operating unit without the blower assembly. DO NOT operate mower unless guards are in place or blower assembly and entire bagger are attached.

Always install counterweights on front axle before operating unit with bagger attached. Always remove counterweights from front axle when bagger is removed from the unit.

Complete a walk around inspection of unit and work area to understand:

- Work area
- Your unit
- All safety decals

ALWAYS check overhead and side clearances carefully before operation. ALWAYS be aware of traffic when operating along streets or curbs.

Keep children and people away. Keep children out of work area and under watchful care of a responsible adult.

NEVER allow children to operate or play on or near unit. Be alert and shut off unit if children enter area.

Keep area of operation clear of all toys, pets, and debris. Thrown objects can cause injury.

Check for weak spots on docks, ramps or floors. Stay alert for hidden hazards.

Avoid uneven and rough terrain. DO NOT operate near drop-offs, ditches, or embankments. Unit can suddenly turn over if a wheel is over the edge of a cliff or ditch, or if an edge caves in.

Dust, fog, etc. can reduce vision and cause an accident. Operate unit only when there is good visibility and light.

Only trained adults may operate unit.

Training includes actual operation.

NEVER operate unit after or during the use of medication, drugs or alcohol. Safe operation requires your complete and unimpaired attention at all times.

NEVER allow anyone to operate this unit when their alertness or coordination is impaired.

Wear adequate safety gear and protective gloves. Wear proper footwear to improve footing on slippery surfaces.

DO NOT wear loose clothing or jewelry and tie back hair that may get caught in rotating parts.

Protect eyes, face and head from objects that may be thrown from unit. Wear appropriate hearing protection.

Avoid sharp edges. Sharp edges can cut. Moving parts can cut off fingers or a hand.

ALWAYS keep hands and feet away from all rotating parts during operation. Rotating parts can cut off body parts.

NEVER place your hands or any part of your body or clothing inside or near any moving part while unit is running.

ALWAYS disengage attachment, stop unit and engine, remove key and allow moving parts to stop before leaving operator's position.

Understand:

- How to operate all controls
- The functions of all controls
- How to STOP in an Emergency
- Braking and steering characteristics
- Turning radius and clearances

DO NOT operate unit with bagger unless front weight is installed.

NEVER operate bagger if the unit's safety interlock system is not working properly.

Always be aware of maximum sweep of bagger when turning. Always allow adequate clearance between bagger, personnel and other objects when turning.

As grass catcher fills, be alert to changing unit stability and control.

Disengage PTO when attachment is not in use.

ALWAYS disengage PTO, stop unit and engine, remove key, engage parking brake and allow moving parts to stop before leaving operator's position.

DO NOT operate at too fast a rate. DO NOT change engine governor settings or over-speed engine. Slow down before turning.

DO NOT mow near dropoffs, ditches or embankments. The mower could suddenly turn over if a wheel is over the edge of a cliff or ditch, or if an edge caves in.

DO NOT mow on wet grass. Reduced traction could cause sliding.

DO NOT try to stabilize the machine by putting your foot on the ground.

Know the weight of loads. Limit loads to those you can safely control and the unit can safely handle.

ALWAYS keep protective structures, guards and panels in good repair, in place and securely fastened.

DO NOT operate in reverse unless absolutely necessary. ALWAYS look down and behind before and while backing.

Watch for holes, ruts, or bumps. Uneven terrain could overturn the machine.

ALWAYS allow adequate clearance for unit, attachments, operator and objects in work area when turning. Slow down before turning.

NEVER carry passengers.

If you cannot back up a slope or you feel uneasy on it, do not mow it.

Mow up and down slopes, not across them.

Keep all movements on the slope *slow* and *gradual*. DO NOT make sudden changes in speed or direction.

Avoid starting or stopping on a slope. If tires lose traction, disengage the blades and proceed slowly *straight* down the slope.

DO NOT operate on slopes over 10°.

DO NOT park on slopes unless absolutely necessary. If you must park on a slope, always chock or block wheels. Always set parking brake.

Use a slow speed. Avoid changing speeds on slopes. Tires may lose traction on slopes even though the brakes are functioning properly.

Use extra care when loading or unloading unit on trailer or truck.

Disengage PTO, stop engine, remove key and wait for all moving parts to stop before servicing, making repairs, adjusting or when clearing debris.

ALWAYS block wheels. Know all jack stands are strong, secure and will hold weight of unit during maintenance.

ALWAYS keep protective structures, guards, and panels in good repair, in place and securely fastened. NEVER modify or remove safety devices.

Keep unit free of grass, leaves, or other debris. Clean up oil or fuel spills.

Check bags and bagger parts prior to each use for any holes, abrasions, mildew, or structural damage. Replace parts when necessary.

Keep all hardware properly tightened.

Maintain or replace safety and instruction labels, as necessary.

Keep unit free of debris. Clean up oil or fuel spills.

DO NOT store bags with grass in them.

DO NOT use double blade kits while bagging.

For extended storage, clean unit thoroughly. See Engine Manual for proper storage.

ALWAYS lower cutting mower deck when unit is parked or stored.

Use only attachments or accessories designed for your unit and properly installed.

Check attachment components frequently. If worn or damaged, replace with manufacturer's recommended parts.

Grass catcher components are subject to wear, damage and deterioration, which could expose moving parts or allow objects to be thrown. Frequently check components and replace with manufacturer's recommended parts, when necessary.

ASSEMBLY



WARNING: AVOID INJURY. Read and understand the entire *Safety* section before proceeding.

TOOLS REQUIRED

- Wrenches: 7/16", 1/2", 9/16"
- Drill
- 13/32" Drill bit
- Utility Knife

UNPACKING UNIT

IMPORTANT: Remove contents from carton carefully. Place painted parts on a flat piece of cardboard to avoid scratching them. Please note there will be two hardware packages, one shipped inside the grass collector and the other with the blower assembly.

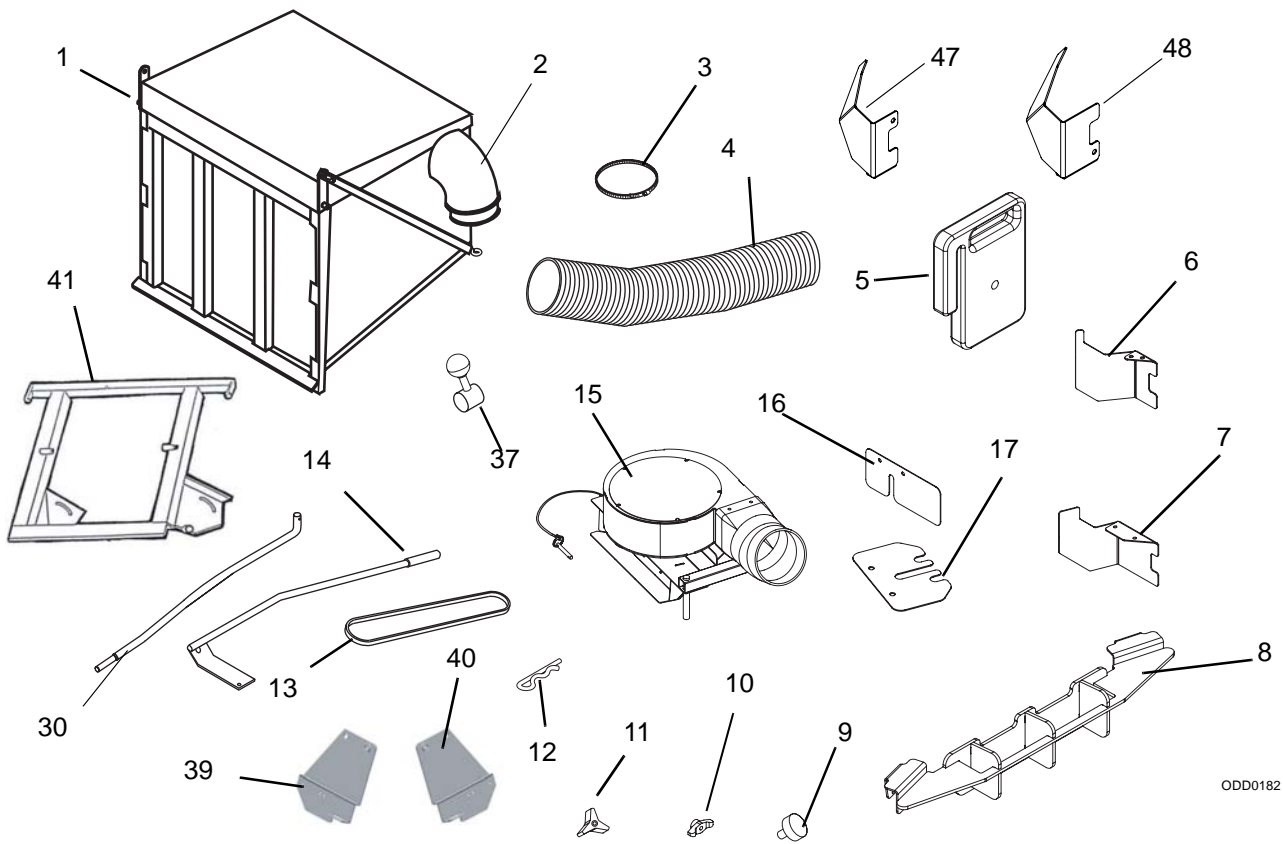
Package Contents:

Check the contents of your kit for the parts listed in figure 2:

Item	Description	Qty	Part Number
1	Collector Assembly	1	00615700
2	Collector Inlet	1	00192000
3	Tool-Less Hose Clamp	1	02770200
4	Hose	1	00486100
5	Counterweight	4	01542200
6	60" Blower Baffle - Front	1	00469651
7	52" Blower Baffle - Front	1	00469551
8	Weight Plate	1	00451851
9	Rubber Bumper	2	07533600
10	5/16" Wing Knob	2	07531700
11	5/16" Wing Knob	3	07500008
12	Hair Pin	2	06701000
13	V-belt - 72-Inch Mower Deck	1	07239700
	V-belt - 52-Inch Mower Deck	1	07236200
	V-belt - 60-Inch Mower Deck	1	07213200
14	Lift Handle	1	00615703
15	Blower Assembly	1	69244000
16	Finger Guard 52-Inch	1	00483851
17	60-, & 72-Inch Finger Guard	1	00491851
18	13/32 x 1-1/2 x 1/4 Flat Washer	2	06400006
19	3/8-16 Nyloc Nut	6	06545500
20	1/4-20 Locking Nut	2	06543500
21	1/4-20 x 1/2 Hex Bolt	2	05947900
22	5/16 x 47/64 x 1/16 Flat Washer	2	06435800

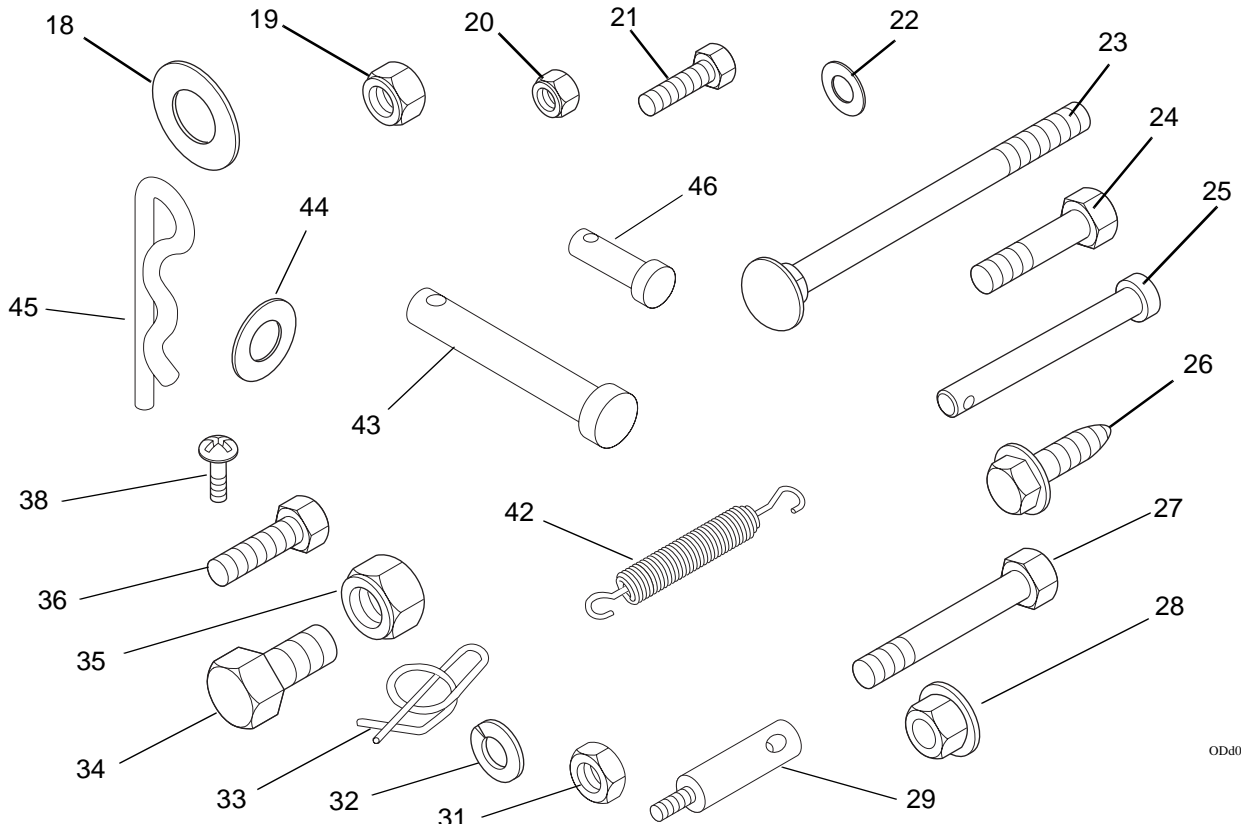
Item	Description	Qty	Part Number
23	Bolt 5/16-18 x 4-1/2	2	06228300
24	3/8-16 x 3 Hex Bolt	6	05957800
25	23/64 / 3/8 x 3-1/4 Clevis Pin	2	02747500
26	3/8-16 x 1/2 Tapping Screw	4	07412900
27	3/8-16 x 2 Hex Bolt	1	05963300
28	3/8-16 Flange Nuts	2	06534900
29	Ball Joint	1	00192400
30	Latch Rod	1	00192300
31	5/16-24 Hex Nut	1	06529500
32	5/16 Lock Washer	1	06308600
33	Rue Ring Cotter Pin	4	06715100
34	3/4-10 1-1/2 Hex Bolt	2	05959600
35	3/4-10 Nylon Lock Nut	2	06540800
36	1/2-13 x 1 Hex Bolt	2	05947100
37	Pivot Frame Handle	2	00615703
38	14 x 3/4 Panhead Screw	4	Not Available
39	Left Frame Leg	1	00615701
40	Right Frame Leg	1	00615702
41	Main Frame	1	00197800
42	Spring	1	08354400
43	5/8 x 3 Detent Pin	2	00673600
44	5/8 Washers	2	06442800
45	5/32 x 2-5/8 Hair Pin Clips	2	06715000
46	Link Pin	2	00194100
47	52"/60" Blower Baffle - Rear	1	00887651
48	72" Blower Baffle - Rear	1	00945151

NOTE: A front blower baffle is not required for 72-inch Mower Decks.



ODD0182

MOUNTING HARDWARE



ODD0436

Figure 2

INSTALLATION

Adjust the Parking Brake

NOTE: The additional weight of the grass container requires a parking brake re-adjustment.

1. Remove the rear wheels.
2. Set the spring length and return gap as shown below.

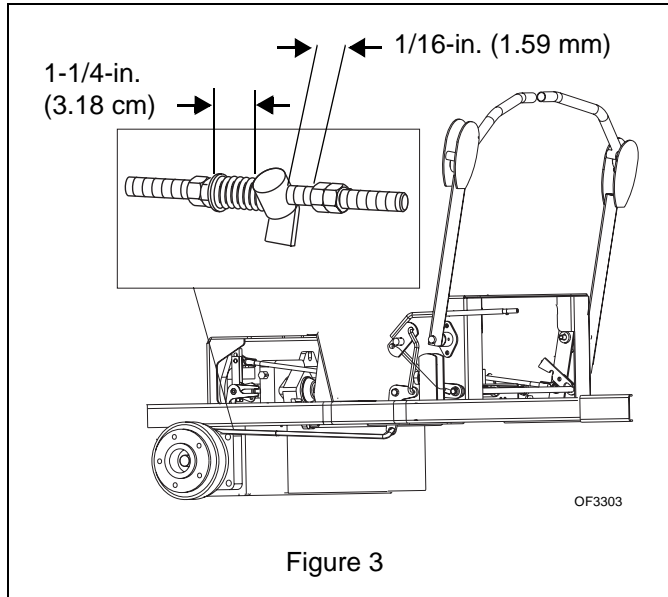


Figure 3

3. Replace the rear wheels. Tighten the lug nuts to 51–72 lb-ft (69–97 N•m).

Assemble the Grass Container

Figure 4

NOTE: Use three or more people to install the collector box on the main frame. The weight and bulk of the grass collector make it difficult to install safely without assistants.

1. Slide the lift handle (item 14) into the slot of the handle mount bracket on the collector box.

NOTE: You may need to remove the grip on the lift handle to fit the handle through the slot.

2. Connect the extension spring to the open hole in the handle mount bracket and then to the lift handle (item 14).
3. Connect the lift handle to the grass container with one 3/8-16 x 2 hex bolt (item 27) and two 3/8-16 flange nuts (item 28).
4. Install the ball joint on the latch rod about half way down the threads on the latch rod so some thread is available for adjustment.
5. Connect the ball joint (item 29) to the latch hook on the grass container with one 5/16-24 hex nut (item 31) and one 5/16 lock washer (item 32).
6. Connect the latch rod to the lift handle with a 3/32 x 3/4 cotter pin (item 33).

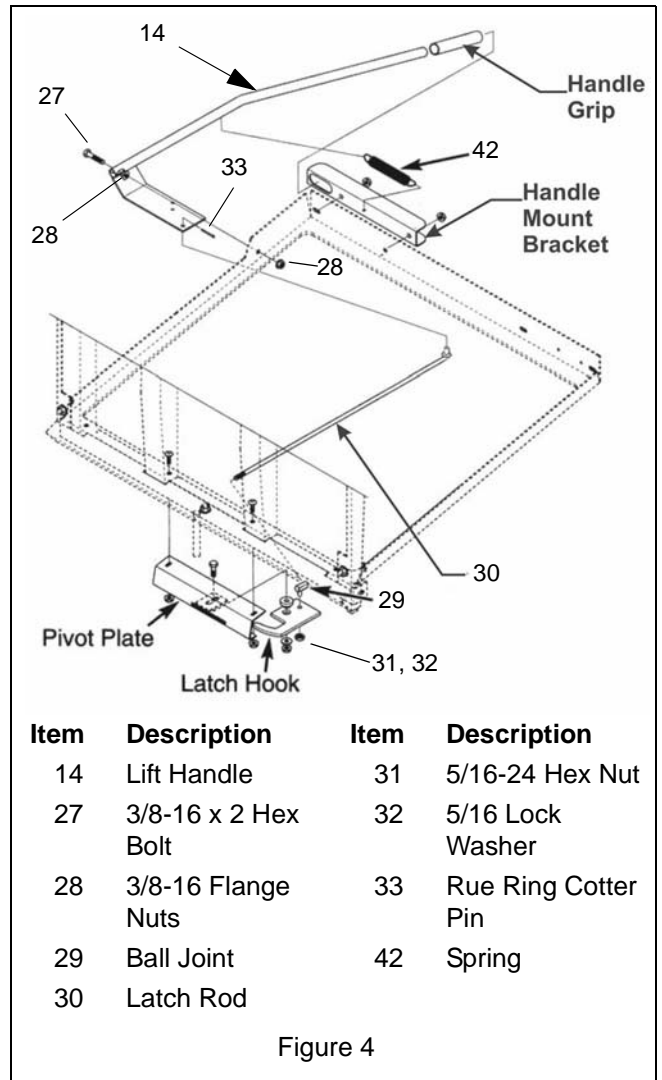


Figure 4

Item	Description	Item	Description
14	Lift Handle	31	5/16-24 Hex Nut
27	3/8-16 x 2 Hex Bolt	32	5/16 Lock Washer
28	3/8-16 Flange Nuts	33	Rue Ring Cotter Pin
29	Ball Joint	42	Spring
30	Latch Rod		

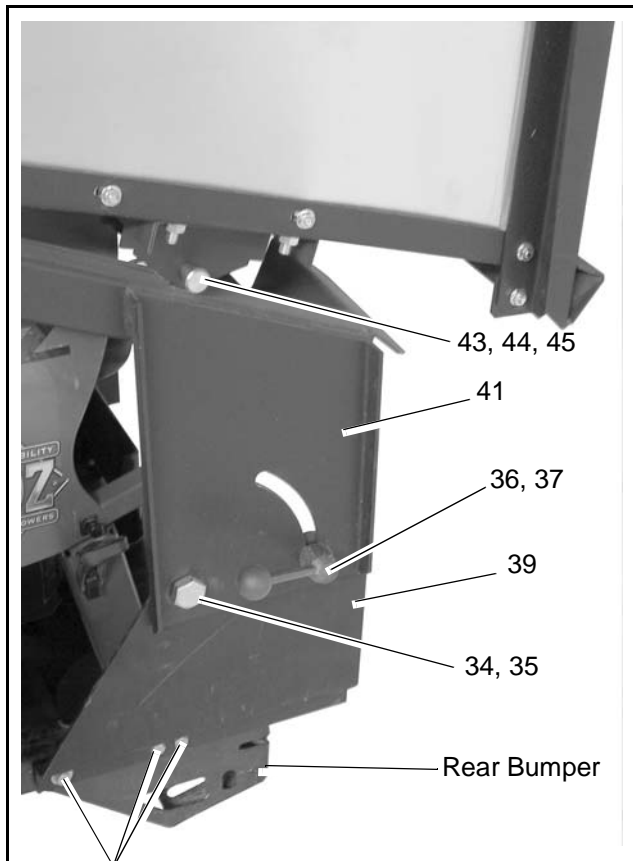
Install the Mounting Frame and Grass Container

Figure 5

1. Remove the hardware holding the rear bumper to the unit frame and then install the left lower frame leg on the frame with three 3/8-16 x 3 hex bolts (item 24) and 3/8 lock nuts (item 19). Repeat for the right lower frame leg.

NOTE: Do not remove the bumper from the unit.

2. Install the main frame on the lower frame legs with two 3/4-10 x 1-1/2 hex bolts (item 34) and two 3/4-10 nylon lock nuts (item 35) and with two 1/2-13 x 1 hex bolts (item 36) and two pivot frame handles (item 37).
3. Have two people hold the grass container in position while a third person connects the container to the main frame with two detent pins (item 43), two 5/8 flat washers (item 44) and two 5/32 x 2-5/8 hair clips (item 45).



19, 24

Item	Description	Item	Description
19	3/8-16 Nyloc Nut	37	Pivot Frame Handle
24	3/8-16 x 3 Hex Bolt	39	Left Frame Leg
34	3/4-10 1-1/2 Hex Bolt	41	Main Frame
35	3/4-10 Nylon Lock Nut	43	5/8 x 3 Detent Pin
36	1/2-13 x 1 Hex Bolt	44	5/8 Washers
		45	5/32 x 2-5/8 Hair Pin Clips

Figure 5

4. Connect the left and right door opening linkages to the main frame with one Rue-Ring cotter pin (item 33) per side.
5. Test the function of the dump mechanism by pulling the lift handle away from the grass container and then lifting upward. The container should pivot backwards toward the ground and the door should open.
6. Install the collector inlet (item 2) on the grass container with four mounting clamps and four 14 x 3/4 panhead screws (item 24).

NOTE: Two people should install the grass inlet. Install the grass inlet from the inside of the grass container and point the inlet down to the ground. Then, while one person aligns the mounting clamps with the holes in the side of the aluminum container, the other person tightens the machine screws.

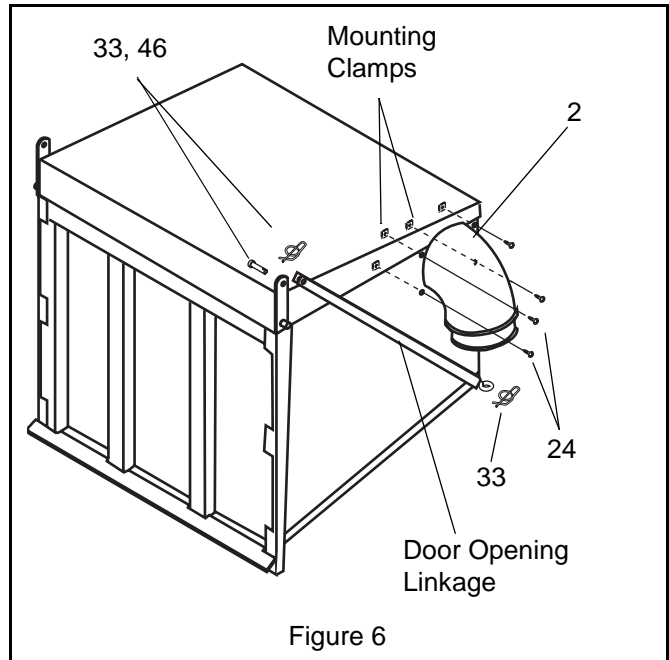


Figure 6

INSTALL COUNTERWEIGHTS



CAUTION: Always install counterweights on front axle before operating unit with bagger attached. Always remove counterweights from front axle when bagger is removed from the unit.

1. Install the weight plate on the front axle with two clevis pins (item 25) and hair pins (item 12).
2. Install the four counterweights on the bracket and secure with two 5/16-18 x 4-1/2 carriage bolts (item 23) and two wing knobs (item 10).

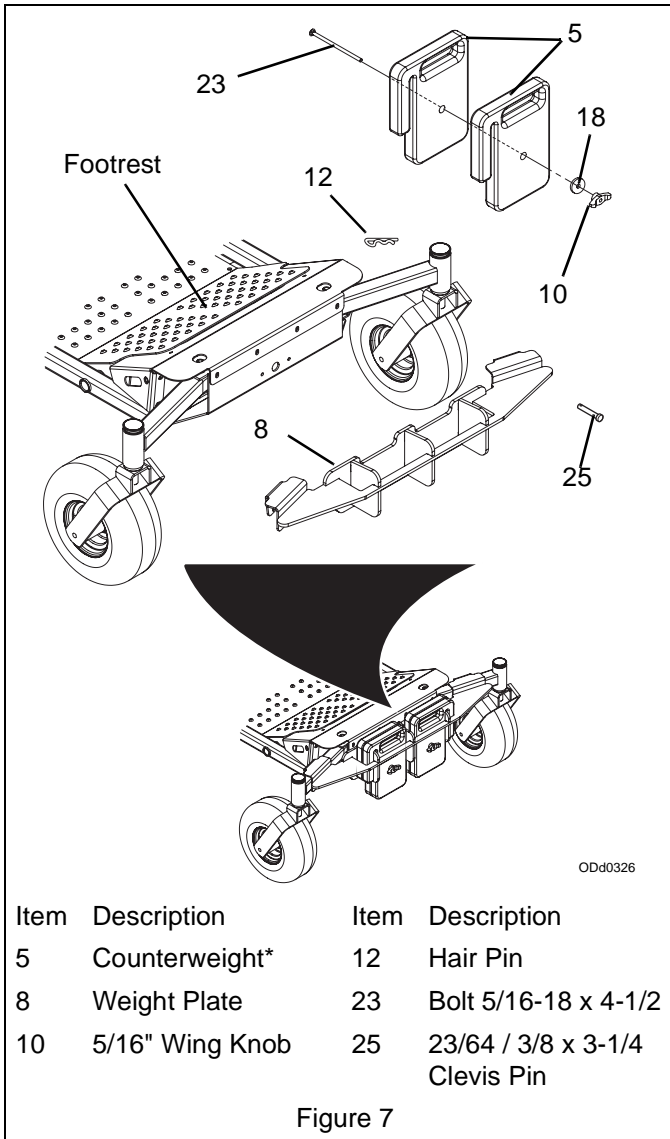


Figure 7

Install Front Baffle and Finger Guard on Blower Assembly (Figure 10)

1. Remove one mounting bolt from the idler release lever.
2. Choose the appropriate blower baffle according to the table below (Figure 8) and then install the blower baffle (item 6 or 7) with two 3/8-16 x 1/2 tapping screws (item 26).

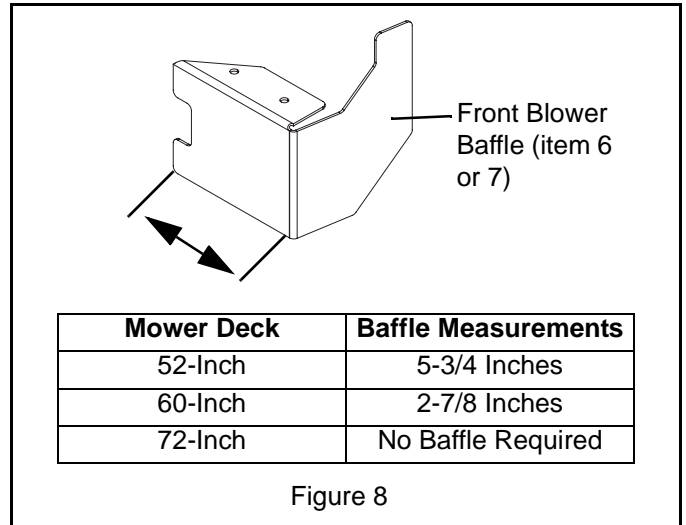


Figure 8

3. Remove the blower cover.
4. Choose the appropriate finger guard according to the mower deck size:
 - 52-inch mower decks use part number 00483851 (1 notch, 8" long).
 - 60 & 72-inch mower decks use part number 00491851 (3 notches, 5.50" long).
5. Install the finger guard with two 1/4-20 x 1/2 hex bolts (item 21) and top-locking flange nuts (item 20). Install the bolts so the nuts are inside the blower.
6. Replace the cover. Make sure the safety decals face outside where operators and bystanders can see them.

Install Rear Baffle

1. Choose the appropriate baffle according to the mower deck size as shown in figure 9.

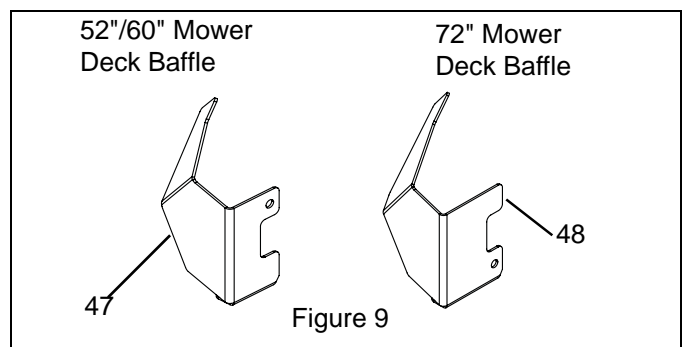
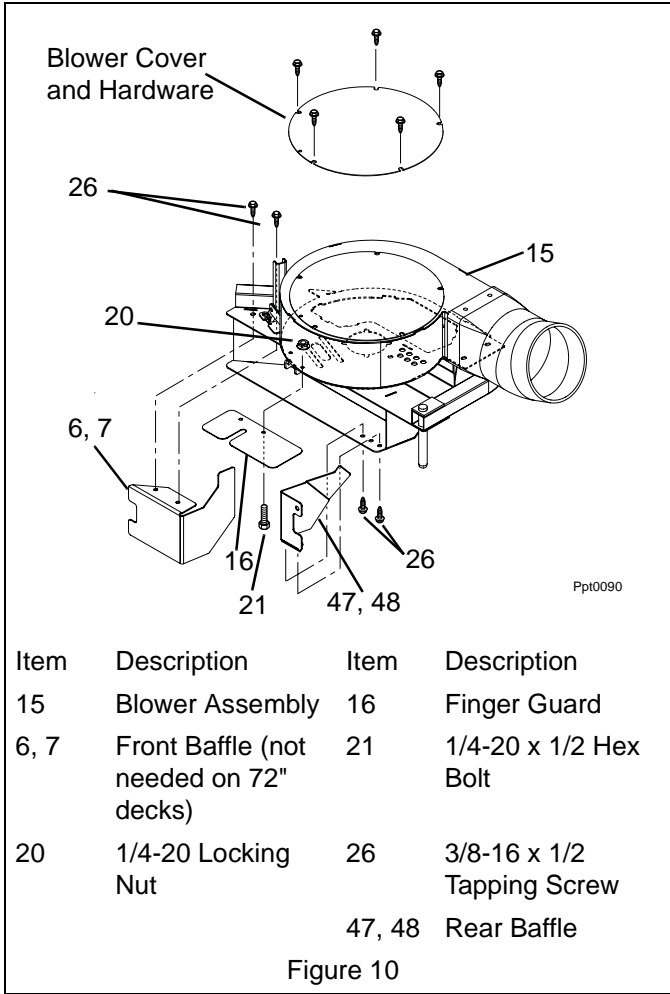


Figure 9

2. Install baffle to blower assembly as shown in figure 10.



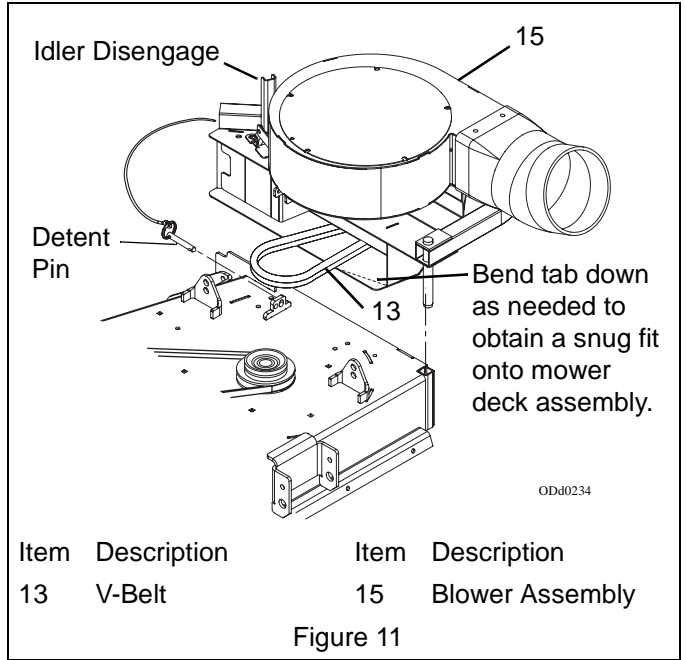
Install Blower Assembly on Deck

1. Remove discharge chute and right belt cover from the deck.
2. Install the drive belt on the blower assembly.

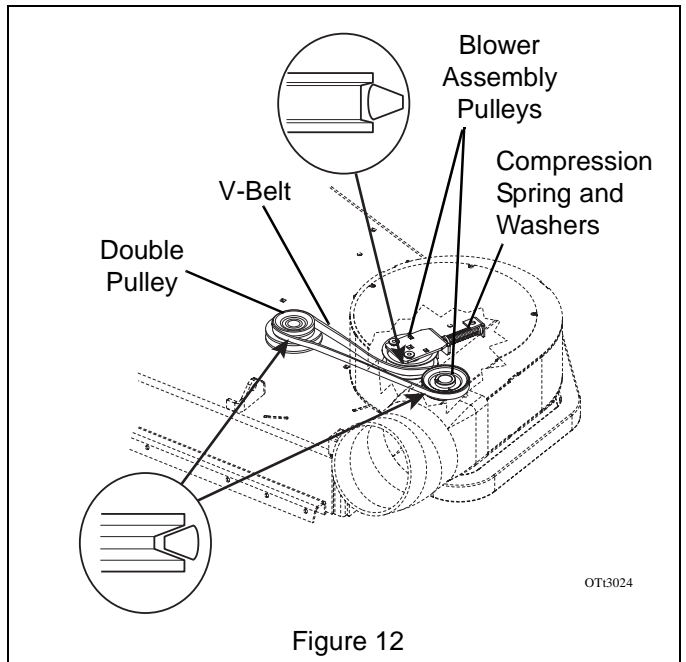
NOTE: The bagger kit includes three V-belts that have a part number printed on each V-belt. Select the appropriate belt for your deck:

- 52-inch mower deck V-belt (part number 07236200)
- 60-inch mower deck V-belt (part number 07213200).
- 72-inch mower deck V-belt (part number 07239700)

3. Install the blower assembly on the deck and secure with the detent pin. Make sure the detent pin passes through the bracket on the mower deck.



4. Connect the drive belt to the deck pulley.



NOTE: To increase belt tension add washers to the compression spring. Decrease tension by removing washers. Four washers for 52", two washers for 60" and 72" decks (figure 13).

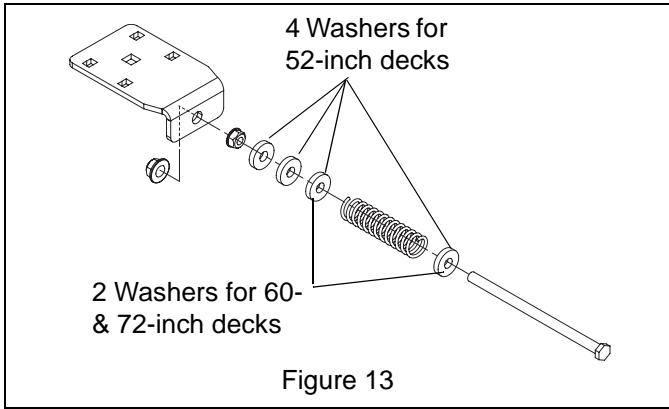


Figure 13

5. Replace the belt cover removed in step 1. Keep the discharge chute for operating the machine without the blower attached.

NOTE: If you prefer tool-less belt removal, replace the belt cover with the hardware provided in this kit. See Figure 14.

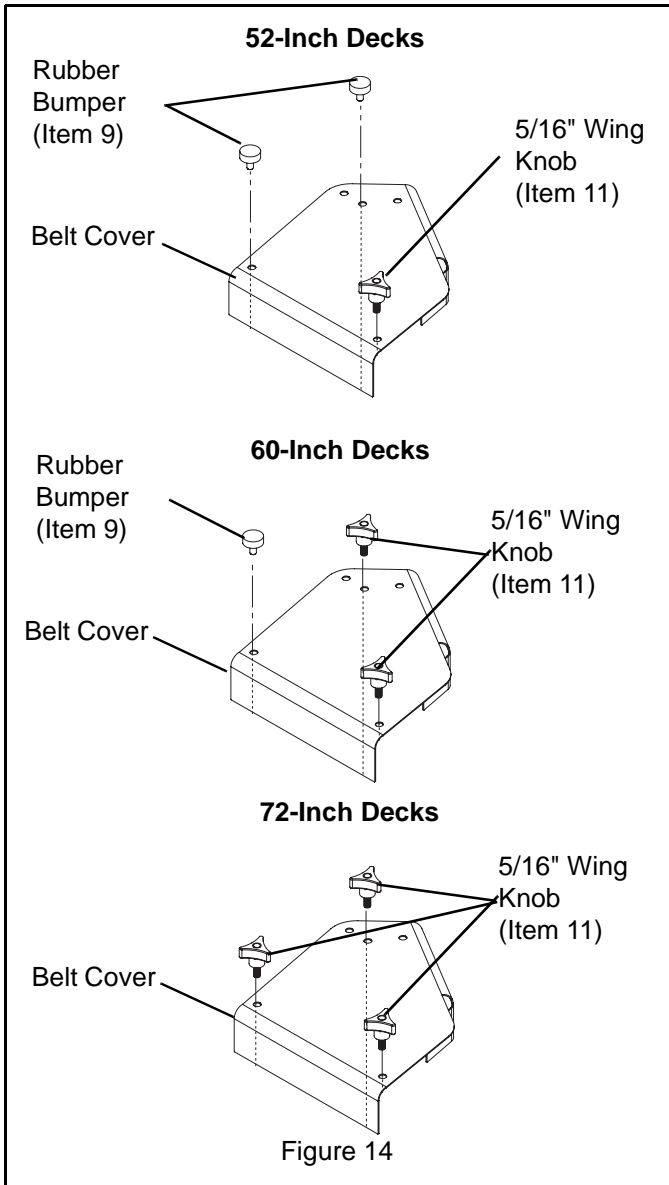


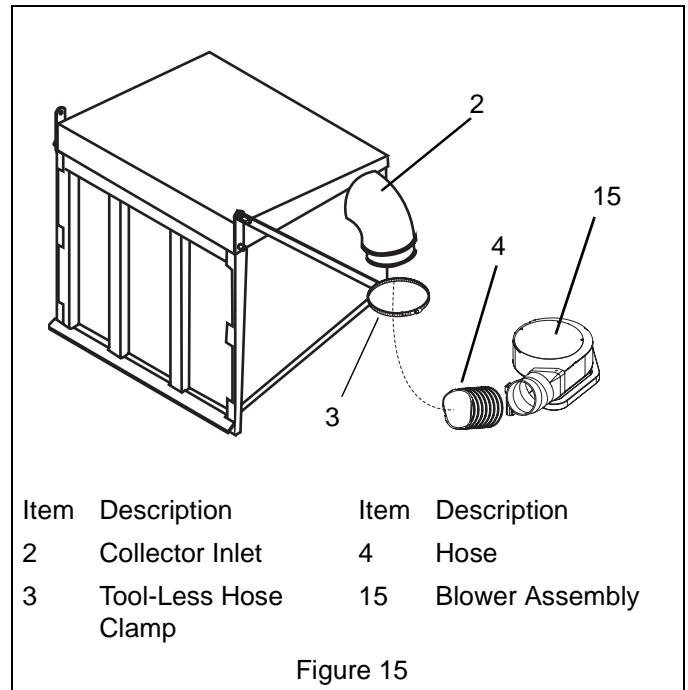
Figure 14

INSTALL HOSE (FIGURE 15)

Connect the Discharge Hose

1. Trim the hose to the required length.
For 52-inch and 60-inch Decks, trim the hose so the hose does not pull tight when the grass container is in the dump position and the deck is set to its lowest cutting height.
For 72-inch decks no trimming is required.
2. Connect the hose to the blower assembly and then to the collector inlet. Secure the hose to the collector inlet with the hose clamp.
3. Adjust the collector inlet angle to remove any sharp bends or kinking.

CAUTION: Deflected material may cause injury. ALWAYS operate mower with bagger cover closed and secured, blower assembly fastened securely, or with chute deflector in operating position.



Item	Description	Item	Description
2	Collector Inlet	4	Hose
3	Tool-Less Hose	15	Blower Assembly Clamp

Figure 15

REMOVAL

REMOVING BAGGER KIT

1. Remove the hose from the blower assembly and collector inlet (see figure 15 on page 13).
2. Remove belt cover.
3. Remove V-belt from double pulley (see figure 12 on page 12).
4. Remove blower assembly (see figure 11 on page 12).
5. Re-install belt cover.
6. Install discharge chute.



CAUTION: Deflected material may cause injury. ALWAYS operate mower with bagger cover closed and secured, blower assembly fastened securely, or with chute deflector in operating position.



CAUTION: Always install counterweights on front axle before operating unit with bagger attached. Always remove counterweights from front axle when bagger is removed from the unit.

7. Remove counterweights (see figure 7 on page 11).
8. Remove grass container, mounting frame and mounting legs (see figure 5 on page 10).

OPERATION



WARNING: AVOID INJURY. Read and understand the entire *Safety* section before proceeding.

BEFORE EACH USE

1. Check bagger parts for wear, deterioration or damage. Replace ONLY with Gravely original service parts before operating.
2. Make sure counterweights are installed.
3. Make sure all hardware is tight.

IMPORTANT: Check tool-less hardware often. Tighten as needed.

4. Remove any grass buildup from bagger parts.
5. Ensure hose is fastened securely on upper boot and blower assembly.

BAGGING

Starting

1. Start engine and engage PTO according to unit owner's manual.
2. Set throttle to full.
3. Choose a slow ground speed.

Shut Off

1. Disengage PTO.
2. Shut off unit according to unit Owner/Operator's manual.



WARNING: Lower attachment, stop engine, and remove key to prevent unauthorized use. DO NOT park on slopes.

EMPTYING THE GRASS CONTAINER

If container stops picking up grass clippings, container may be full.

To empty container:

1. Park the unit where you want to empty the container.
2. Disengage PTO, stop engine and remove ignition key. Wait for all moving parts to stop before leaving operator's position.
3. Pull the lift handle away from the grass container and then lift upward. The container should pivot backwards toward the ground and the door should open, releasing container contents.
4. Clean out hose.
5. Pull the lift handle back and down to pivot the container upright and to close the door.
6. Push the lift handle in towards the container to lock the door latch in place.

IMPORTANT: Make sure the container door latches securely.

UNCLOGGING GRASS CONTAINER



WARNING: MOVING PARTS can cut or amputate body parts.

NEVER attempt to clear blower assembly while engine is running.

ALWAYS stop engine, remove key, and wait for moving parts to stop.

Sharp edges can cut. Movement of parts can cut off fingers or a hand. Wrap blade(s), wear sturdy gloves and use extreme caution when working near blades or impeller.



WARNING: PINCH POINT! Use extreme caution when unclogging blower assembly. Impeller can cut or pinch your hand, even when not in operation. Wear sturdy gloves when working near impeller.

If hose or blower assembly gets clogged, stop forward motion and allow unit to clear itself. If unit will not clear itself, unclog the hose and/or blower assembly manually as instructed below.

1. Stop engine and remove ignition key. Wait for all moving parts to stop.
2. Remove hose from inlet on grass container. (figure 15).
3. Remove hose from blower assembly.

NOTE: Perform steps 4 and 5 if clog is in the hose:

4. Remove clogged grass.

5. Reinstall hose.

NOTE: Perform steps 6 and 7 if clog is in blower assembly.



WARNING: Blades rotate when impeller rotates. Impeller rotates when blades rotate. Block blades to prevent rotation before proceeding.

6. Clear grass from blower assembly.
7. Reinstall hose and tighten hose clamp.

OPERATING TIPS

- Cut grass when it is dry.
- Cut grass in two passes when cutting thick, long, or wet grass. Make the first cut higher than desired. Make the second cut at desired height.
- Always use full throttle when bagging.

MAINTENANCE

Gravely Dealers will provide any service or adjustments which may be required to keep your unit operating at peak efficiency.



WARNING: AVOID INJURY. Read and understand the entire *Safety* section before proceeding.

MAINTENANCE SCHEDULE

The chart below shows the recommended maintenance schedule that should be performed on a regular basis.

MAINTENANCE SCHEDULE

Service Performed	Each Use	Every 10 hrs.
Check Fasteners	•	
Inspect Bagger Parts	•	
Clean Unit	•	
Check V-belt		•*

* Check V-belt tension after initial first two hours of use.

Check Fasteners

IMPORTANT: Be certain that all hardware is tight before each use. Pay special attention to the guards and safety shields. Check tool-less hardware often. Tighten as needed.

Inspect Bagger Parts

Before each use, inspect bagger parts for any holes, abrasions, or structural damage. Replace any worn or damaged parts.

Clean Unit

Clear away grass build-up in bagger before and after each use.

Check V-Belt

Check V-belt tension after initial first two hours of use and every 10 hours thereafter. Check V-belt for wear every 10 hours; replace V-belt if worn or deteriorated (see *Replacing V-Belt (Figure 16)* on page 15).

REPLACING V-BELT (FIGURE 16)

1. Remove belt cover.
2. Remove blower assembly from mower deck.
3. Remove old V-belt.
4. Install new V-belt on blower assembly pulley.
5. Install blower assembly to mower deck.
6. Route new V-belt onto double pulley (see *Install Blower Assembly on Deck* on page 12).

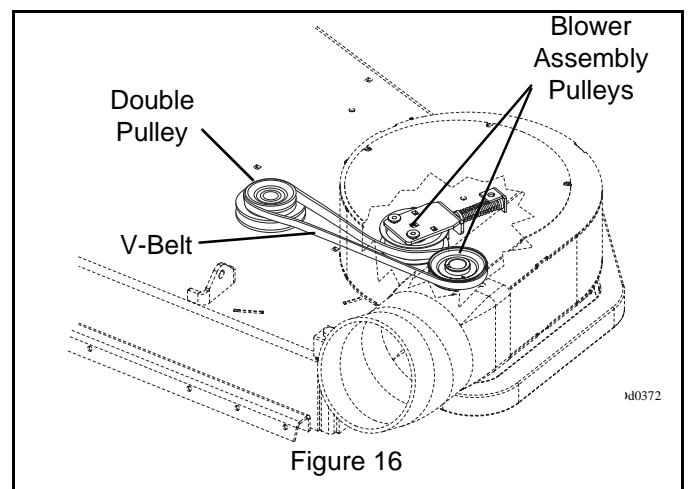


Figure 16

STORAGE



WARNING: AVOID INJURY. Read and understand the entire *Safety* section before proceeding.

IMPORTANT: NEVER spray unit with high-pressure water. DO NOT store unit outdoors.

Clean plastic surfaces with sponge and mild detergent. Dry with a soft cloth.

Remove all debris from mesh bags before storing.

Remove all dirt, grease, leaves, etc. from unit.

Store in a clean, dry area.

Ensure all fasteners are properly tightened. Inspect moving parts for damage and wear.

Touch up all rusted or chipped painted surfaces.

TROUBLESHOOTING

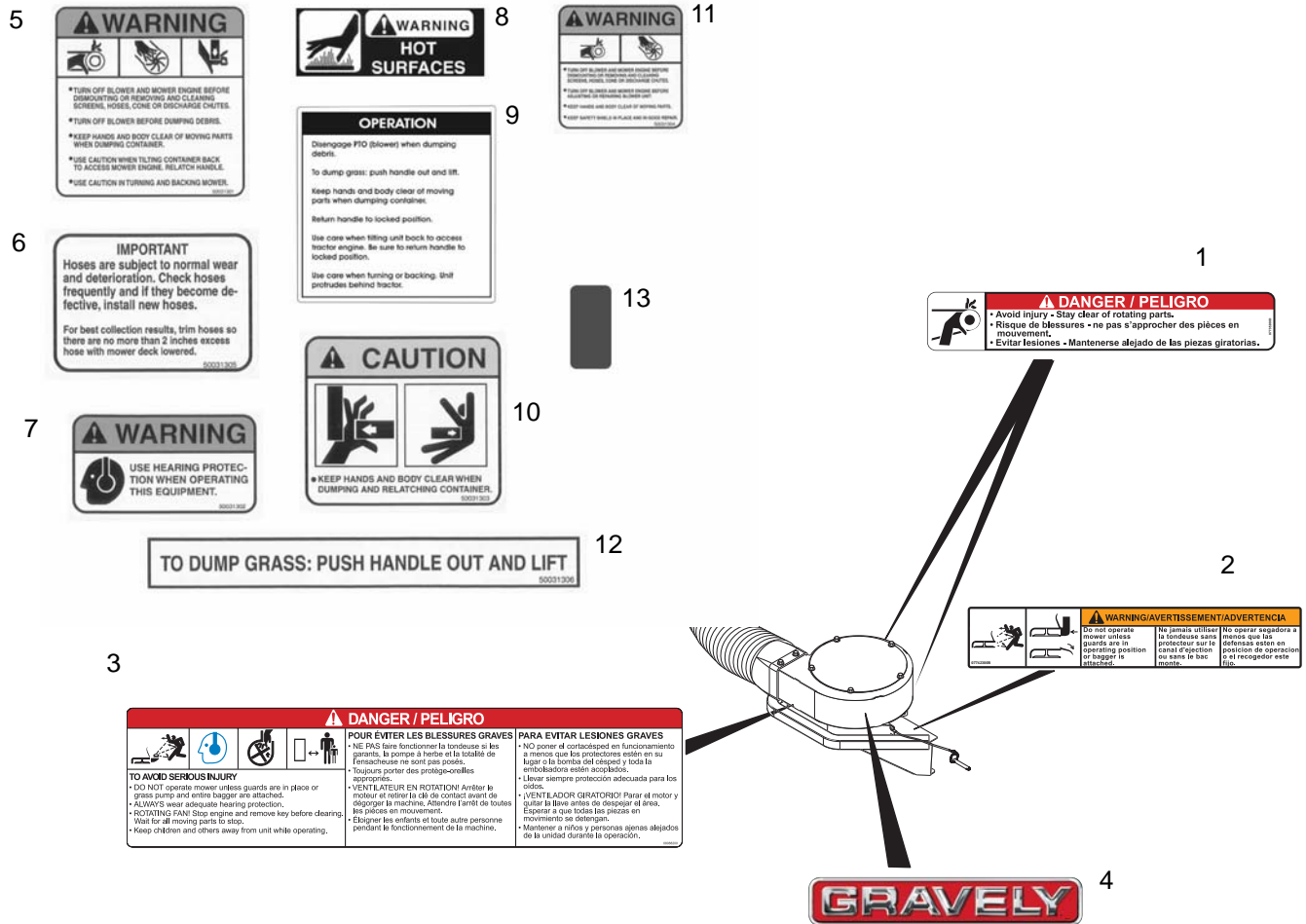
PROBLEM	PROBABLE CAUSE	CORRECTION
Collector fails to pickup grass or leaves.	<ol style="list-style-type: none"> 1. The dump hopper is full. 2. Grass container is clogged. 	<ol style="list-style-type: none"> 1. Shut off engine, remove key, and empty hopper. 2. See <i>Unclogging Grass Container</i> on page 14.
Blower Assembly stops or slows.	<ol style="list-style-type: none"> 1. Worn or damaged V-belt. 	<ol style="list-style-type: none"> 1. See <i>Replacing V-Belt (Figure 16)</i> on page 15.

SPECIFICATIONS

Model Number	89203100
Description	200 Series Bagger
Added Length to Unit	27"
Bagger Capacity	12 Cu. Feet
Added Width to Mower Deck	12 inches

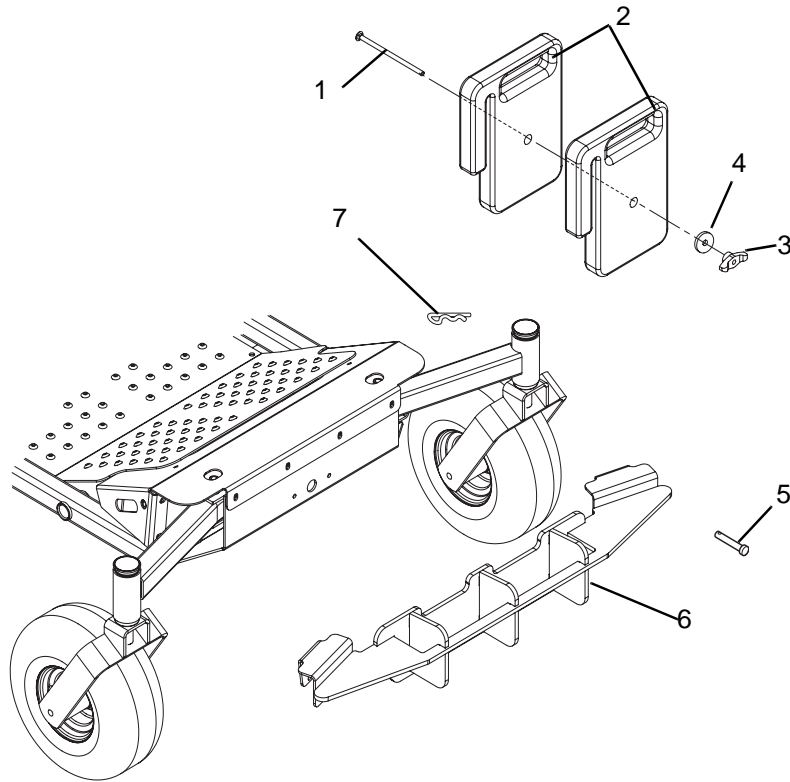
PARTS LIST

DECALS



Item	Part No.	Qty.	Description
1	07735200	2	Decal, Danger
2	07742300	1	Decal, Warning
3	08088200	1	Decal-Caution, Grass Pump
4	05225500	1	Decal, Gravely
5	05360200	1	Decal, Warning
6	05360600	1	Decal, Important
7	05360300	1	Decal, Hearing Warning
8	05360800	1	Decal, Hot Surface Warning
9	05361000	1	Decal, Operation
10	05360500	1	Decal, Pinch Point Caution
11	05360400	1	Decal, Rotating Parts Warning
12	05360700	1	Decal, Lift Handle Instruction
13	05360900	2	Decal, Reflective

COUNTERWEIGHTS

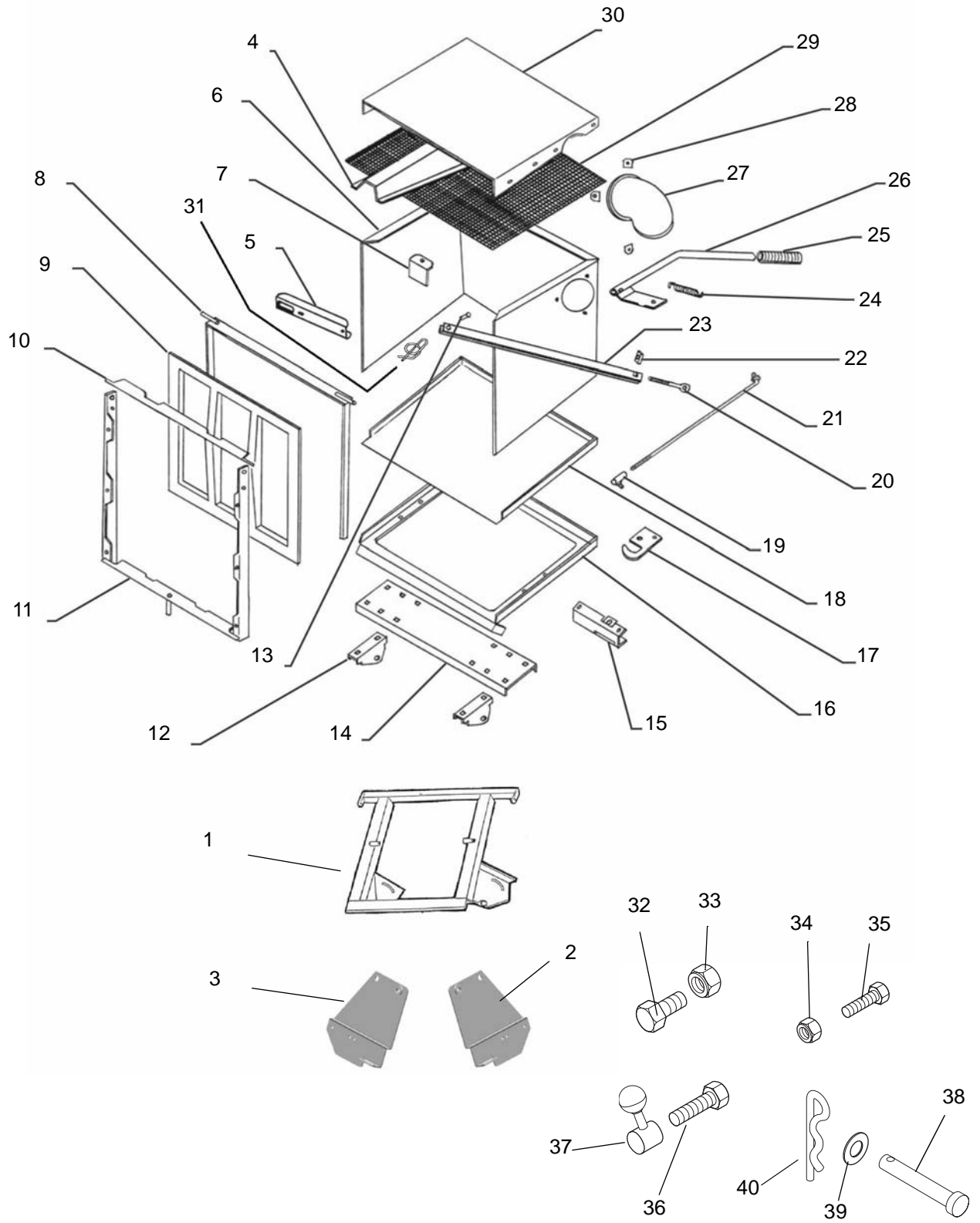


ODd0326

Item	Part No.	Qty.	Description
1	06228300	1	Bolt .312-18 x 4.5
2	01542200	4	Counterweight
3	07531700	2	Knob, Wing .312-18 UNC (Tool-less hardware option)
4	06400006	2	Washer, Flat Steel .406 x 1.50 x .245
5	02747500	2	Pin-Clevis .368/.373 x 3.25
6	00451851	1	Weldment, Weight Plate
7	06701000	2	Hair Pin

— NOTES —

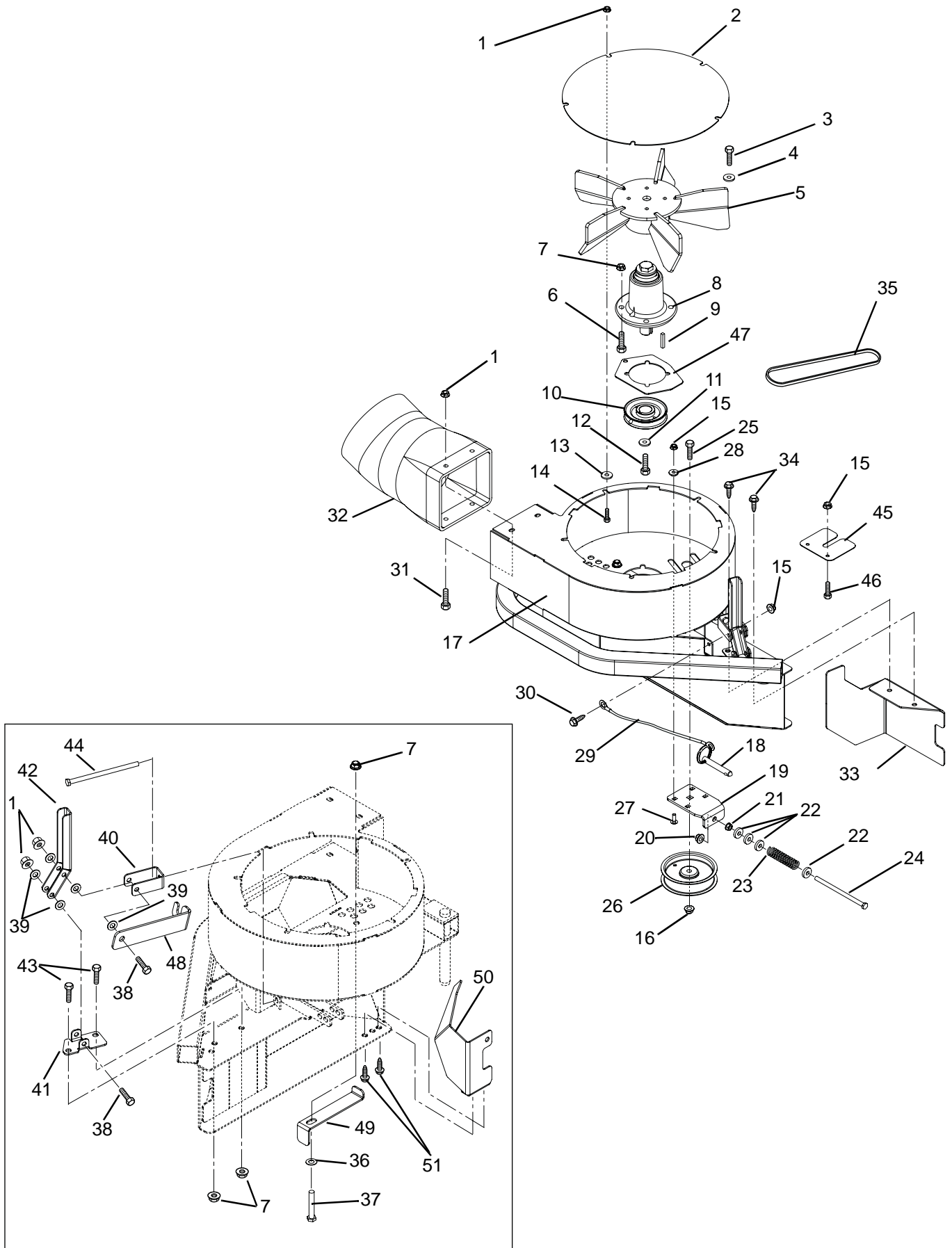
GRASS CONTAINER ASSEMBLY



GRASS CONTAINER ASSEMBLY

Item	Part No.	Qty.	Description
1	00197800	1	Frame, Top Main
2	00615701	1	Frame, Main Left Leg
3	00615702	1	Frame, Main Right Leg
4	00193700	1	Screen Support
5	00193500	1	Handle Mount
6	00193600	1	Box Back and Sides
7	00194000	1	Fill Gauge
8	00193400	1	Box Door/Frame
9	00193000	1	Plastic Door
10	00193300	1	Upper Door Member
11	00192900	1	Door Frame Assembly
12	00192800	2	Pivot Bracket
13	00194100	2	Linkage Pin
14	00192700	1	Base Frame Pivot Mount
15	00192600	1	Latch Hook Plate
16	00193100	1	Base Frame
17	00192500	1	Latch Hook
18	00193200	1	Box Bottom
19	00192400	1	Ball Joint
20	07068800	2	Adjusting Screw
21	00192300	1	Latch Rod
22	06545600	2	Nut, Adjusting
23	00192200	2	Rod, Linkage
24	08354400	1	Spring, Latch
25	07538700	1	Grip, Handle
26	00192100	1	Handle, Box
27	00192000	1	Inlet
28	00191900	4	Clamp, Inlet
29	00193800	1	Screen
30	00193900		Box Top, Aluminum
31	06715100	4	Rue-Lock Pins
32	05959600	2	Bolt, Hex .75-10 x 1.50 Grade
33	06540800	2	Nut, Lock .75-10
34	06545500	6	Nut, Nylon Lock .375-16
35	05957800	6	Bolt, Hex .375-16 x 3.0 Grade 5
36	05947100	2	Bolt, Hex .50-13 x 1 Grade 5
37	00615703	2	Handle, Pivot Frame
38	00673600	2	Pin, Detent .625 x 3.00
39	06442800	2	Washer Flat Steel .656 x 1.31 .095
40	06715000	2	Pin, Hair .156 x 2.625

BLOWER HOUSING ASSEMBLY



BLOWER HOUSING ASSEMBLY (CONTINUED)

Item	Part No.	Qty.	Description
1	06545400	11	Nut, .31-18 Nyloc Flange
2	00451951	1	Cover, Blower
3	05978900	1	Bolt, Hex .62-18 x 1.75
4	06445700	1	Washer, Bevelled .63 x 1.625 x .14
5	00468200	1	Weldment, Impeller
6	05958000	4	Bolt-Hex .38-16 x 1.25 Grade 5
7	06545500	7	Nut, .38-16 Nyloc Flange
8	58803600	1	Maintenance Free Spindle Assembly
9	06611200	1	Key, Square .25 x .25 x 1.00 RC 40-50
10	04903900	1	Weldment, Pulley-V 3.50 x 1.004 with Key
11	06441700	1	Washer, Flat Steel .39 x 1.5 x .125
12	05900013	1	Bolt, Hex .38-16 x 1.00 EP30
13	06514900	5	Nut-Push .312
14	06220800	5	Bolt, Round Head Square Short Neck .31-18 x .75 Grade 5
15	06543500	7	Nut, Locking-Top-Flange .25-20
16	06545500	1	Nut, .38-16 Nyloc Flange
17	00469851	1	Weldment, Blower Housing
18	01593500	1	Pin, Spring Ball .375OD x 1.50
19	00168100	1	Bracket, Adjustable Idler
20	06545400	1	Nut, .31-18 Nyloc Flange
21	06530400	1	Nut-Spin Lock-Flange .312-18
22	06439100	4	Washer, Flat Steel .38 x .87 x .179
23	08312100	1	Spring, Compression .092 x .77 x 3.13
24	05957600	1	Bolt, Hex .31-18 x 5.50 Grade 5
25	05958500	1	Bolt, Hex .38-16 x 1.75 Grade 5
26	07327100	1	Pulley, Idler 4.00
27	06219900	4	Bolt, Round Head Square Neck .25-20 x .75 Grade 5
28	05513400	4	Bushing-Flange .265 x .437 x .250 x .750
29	06927100	1	Cable, Hood
30	05946800	1	Bolt, Hex .25-20X.75 Grade 5
31	05947000	4	Bolt, Hex .31-18X.75 Grade 5
32	00452200	1	Adapter, Hose
33	00469551	1	Baffle, Blower 52"
	00469651	1	Baffle, Blower 60"
34	07412900	2	Screw, Tapping .38-16 x .50 Hex Washer Head
35	07239700	1	V-Belt, 72" Mower Deck
	07236200	1	V-Belt, 52" Mower Deck
	07213200	1	V-Belt, 60" Mower Deck
36	06436200	1	Washer, Flat - Steel .406 x .812 x .065
37	05948700	1	Bolt, Hex .38-16 x 1.00 Grade 5
38	05957200	2	Bolt, Hex .31-18 x 2.00 Grade 5
39	06433600	5	Washer, Flat-Nylon .375 x .75 x .060
40	00474251	1	Link, Idler Release
41	00474451	1	Mount, Idler Release Lever
42	00474351	1	Lever, Idler Release
43	05959400	2	Bolt, Hex .38-16 x .75 Grade 5
44	05957600	1	Bolt, Hex .31-18 x 5.50 Grade 5
45	00483851	1	Finger Guard 52-Inch Deck
	00491851	1	Finger Guard 60 and 72-Inch Deck
46	05947900	2	Bolt, Hex .25-20 x .50 Grade 5
47	00583851	1	Plate, Bearing Housing Support
48	00952451	1	Lock, Idler Release Lever
49	00956151	1	Finger, Belt
50	00887651	1	Baffle, Blower Rear 52"/60"
	00945151	1	Baffle, Blower Rear 72"
51	07412900	2	Screw, Tapping .38-16 Hex Washer Head Thread Rolling



Ariens Limited



Warranties

2-Year Limited Lawn and Garden Consumer Warranty

Ariens Company (Ariens) warrants to the **original purchaser** that Ariens and Gravelly brand consumer products manufactured by Ariens Company will be free from defects in material and workmanship for a period of two (2) years after the date of purchase, and that Ariens will repair any defect in material or workmanship, and repair or replace any defective part, subject to the conditions, limitations and exclusions set forth herein. Such repair or replacement will be free of charge to the **original purchaser** (labor and parts), except as noted below.

The two-year duration of this warranty applies only if the product is put to ordinary, reasonable, and usual personal, family, or household uses. If the product is put to any business, commercial, or industrial use such as, but not limited to, commercial landscaping, mowing or snow removal services, or golf course or park maintenance, or agricultural or farmstead use, then the duration of this warranty is ninety (90) days after the date of purchase, or one (1) year after the date of purchase if the product is labeled as a Professional/Commercial Product. The duration of this warranty shall be ninety (90) days after the date of purchase if any product is rented or leased.

2-Year Limited Lawn and Garden Commercial Warranty

The Ariens Company (Ariens) warrants to the **original purchaser** that all Gravelly Pro and ProMaster products manufactured by Ariens will be free from defects in material and workmanship for a period of two (2) years after the date of purchase or 1000 hours of use, whichever comes first. An authorized Gravelly dealer will repair any defect in material or workmanship, and repair or replace any defective part, subject to the conditions, limitations and exclusions set forth herein. Such repair or replacement will be free of charge to the **original purchaser** (labor and parts), except as noted below.

The duration of this warranty shall be ninety (90) days after the date of purchase or 1000 hours of use, whichever comes first, if any product is rented or leased.

3-Year Limited Sno-Thro Warranty

Ariens Company (Ariens) warrants to the **original purchaser** that Sno-Thro products manufactured by Ariens Company will be free from defects in material and workmanship for a period of three (3) years after the date of purchase, and will repair any defect in material or workmanship, and repair or replace any defective part, subject to the conditions, limitations and exclusions set forth herein. Such repair or replacement will be free of charge to the **original purchaser** (labor and parts), except as noted below.

The three-year duration of this warranty applies only if the product is put to ordinary, reasonable, and usual personal, family, or household uses. If the product is put to any business, commercial, or industrial use, then the duration of this warranty is ninety (90) days after the date of purchase, or one (1) year after the date of purchase if the product is labeled as a Professional/Commercial Product. The duration of this warranty shall be ninety (90) days after the date of purchase if any product is rented or leased.

DURA-CLEAN™ Auger Limited Lifetime Warranty

Ariens Company (Ariens) warrants to the **original purchaser** that the rubber components of the DURA-CLEAN™ Auger manufactured by Ariens Company will be free from defects in material and workmanship and will not wear out for the life of the Sno-Thro, except as noted below.

Ariens Company will provide for the replacement of any of the rubber components of the DURA-CLEAN™ Auger found upon examination by the Ariens Company to be defective or worn out. Replacements will be supplied free of charge. Labor is not included after two (2) years from the date of purchase of the Sno-Thro.

The lifetime limited warranty shall apply if the product is put to ordinary, reasonable, and usual personal household use. If the product is put to any business, commercial, industrial, rental, or leased use, the warranty shall be against defects in material and workmanship for ninety (90) days following the date of purchase.

Exceptions, Limitations, Exclusions

These warranties are subject to the following conditions, limitations, and exclusions:

To obtain warranty service, the following conditions must be met:

- The purchaser must perform the maintenance and minor adjustments explained in the owner's manual.
- The purchaser must promptly notify Ariens Company or an authorized Ariens service representative of the need for warranty service.
- The purchaser must transport the product to and from the place of warranty service.
- Warranty service must be performed by a respective Ariens or Gravely authorized service representative.
- To find an Ariens or Gravely authorized service representative, contact Ariens at:

655 W. Ryan St, P.O. Box 157

Brillion, WI 54110-0157

(920) 756 - 2141

www.ariens.com

www.gravely.com

This warranty is subject to the following limitations:

- Genuine Ariens or Gravely brand service parts and accessories not purchased with the product covered by this warranty, but which are later purchased and used with that product, are warranted to be free from defects in material and workmanship for a period of ninety (90) days after date of purchase, and Ariens Company will repair or replace any such part or accessory free of charge, except for labor, during that period.
- Batteries are warranted only for a period of twelve (12) months after date of purchase, on a prorated basis. For the first ninety (90) days of the warranty period, a defective battery will be replaced free of charge. If the applicable warranty period is more than 90 days, Ariens Company will cover the prorated cost of any defective battery, for up to twelve (12) months after the date of purchase.

Ariens may from time to time change the design of its products. Nothing contained in this warranty shall be construed as obligating Ariens to incorporate such design changes into previously manufactured products, nor shall such changes be construed as an admission that previous designs were defective.

LIMITATION OF REMEDY AND DAMAGES

Ariens Company's liability under this warranty, and under any implied warranty that may exist, is limited to repair of any defect in workmanship, and repair or replacement of any defective part. Ariens Company shall not be liable for incidental, special, or consequential damages (including lost profits). Some states do not allow the exclusion of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

The following items are excluded from this warranty:

- Engines and engine accessories are covered only by the engine manufacturer's warranty and are not covered by this warranty.
- Peerless gearboxes and/or transmissions are covered only by Peerless' warranty and are not covered by this warranty.
- Hydro-Gear transmissions and/or Hydro-Gear drive components are covered only by the Hydro-Gear warranty and are not covered by this warranty.
- Parts that are not genuine Ariens or Gravely brand service parts are not covered by this warranty.
- Except as specifically warranted, normal maintenance, services, and normal replacement items, such as spark plugs, oil, oil filters, air filters, mufflers, belts, tires, shoes, runners, scraper blades, shear bolts, mower blades, mower vanes, headlights, light bulbs, knives, etc. are not covered by this warranty except as noted below.
- Mufflers, belts, and tires on consumer lawn and garden products are warranted to the **original purchaser** for two years.
- Friction discs, idlers, cables, and electrical components on Sno-Thros put to usual personal household use are warranted to the **original purchaser** for two years.
- Any defect which is the result of misuse, alteration, improper assembly, improper adjustment, neglect, or accident is not covered by this warranty.
- This warranty applies only to products purchased in the United States (including Puerto Rico) and Canada. In all other countries, contact place of purchase for warranty information.

DISCLAIMER OF FURTHER WARRANTY

Ariens Company makes no warranty, express or implied, other than what is expressly made in this warranty. If the law of your state provides that an implied warranty of merchantability, or an implied warranty of fitness for particular purpose, or any other implied warranty, applies to Ariens Company, then any such implied warranty is limited to the duration of this warranty. Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.



GRAVELY
655 West Ryan Street
P.O. Box 157
Brillion, WI 54110-0157
920-756-2141
Fax 920-756-2407
www.gravelly.com